ICE CRUSHER HEATERS

CFMoto U10 | U10 XL Dual Fan Heater

ICCH-UH-C-CFU10 216 226 2x #16 Hose Clamps 12x #10 Hose Clamps **39 231** 2x #6 Hose Clamps 2x 5/16" x 5" Carriage Bolts 2x 5/16" Serrated Flange Nut 4x #6 Screw 683-WC 8x #8 1/2" Screws 1x - Dash Switch Power Loom 3x 1/4" Push Pins 480 1189 1x Rubber Grommet 1x CFMoto Pigtail 1x 1-1/8" Y Fitting 682 1x 3-Way Ball Valve 1x - Dash Switch 30x - 11" Zip Ties 4x 90° Silicone Elbow



(1x) 3" Vent Brkt

CRUSHER HEATERS



Please read all instructions before beginning installation. It is easiest to physically split the instructions in two halves, one the text portion and the other the picture portion. It makes referring back and forth between the two much simpler.

When working on cooling systems always allow vehicles to cool to avoid being burned or scalded by hot coolant.

Always disconnect vehicles negative battery lead before working on electrical systems.

Please note: Before drilling any holes check area behind firewall/dash panels to make sure no damage or interference with equipment will occur by drilling holes and fitting of vents.

1. Pre-Installation

- a. Use a plastic pry tool or flat screw driver to remove the four Dash Vent Bezels and two Defrost Vent Bezels as shown in Figure 1.
- b. Cut out and position the Defrost Template as shown in Figure 2. Use a pointy object to transfer the hole centers as shown. Use a 1/8" Drill Bit to drill pilot holes at each location. Progressively increase the drill diameter for the INTERIOR HOLES ONLY. Leave the outside two holes as 1/8" holes. Increase to 3/8" drill bit, use an oscillating tool or razer blade to cut the holes into an oval as shown. Set bezels aside.
- c. Remove the Main Skid Plate to gain access to hose routing areas. Remove the hardware shown in Figure 3. There may be additional hardware not shown.
- d. Use an 13mm socket to remove the two nylock nuts and washers shown in Figure 4.

2. Duct Hose Routing & Vent Hookup

- a. Using Figure 5, cut and assemble the 2" Duct Hoses and Y Fittings using zip ties to secure the joints. Route each segment of hose to it's designated locations. Leave the ends of the hose dangle in the center console area.
- b. Attach the Four Rectangular Vents to their 2" Duct Hose, secure with Zip Ties and press into place as shown in Figure 6 and Figure 7.
- c. Attach the 2" Duct Hose for the Defrost Vents to the Slotted Vent Base, secure with a Zip Tie. Hold the Vent Base up to the opening, align the holes in the Slotted Vent Base with the ones drilled into the Defrost Bezel. Place the Slotted Grill over the Bezel and secure with two screws as shown in Figure 8 and Figure 9. Press the assembly back into place.

3. Heater Mounting

- a. Attach the Heater to the Heater Bracket using the 5" x 5/16" Carriage Bolts and Nuts as shown in Figure 10.
- b. Position the heater as shown in Figure 11. Attach the 2" Duct Hoses to the ports and secure with zip ties.
- c. Raise the Heater assembly into place over the two threaded studs on the Firewall. Secure with the original Washer and Nut. See Figure 12, Be Sure to remove the Black Shipping Plugs if present.

4. Wiring

- a. Locate the 12V Cigarette on the Center Dash. From behind the dash, follow the short harness until it reaches a white plug. Disconnect the plug, insert the CFMoto U10 Power Pigtail between the two connections as shown in Figure 13.
- b. Using the included Heater Harness, connect the 2-pin connector to the base of the CFMoto U10 Power Pigtail.
- c. Route the white 4-pin connector to the Heater plug and attach it.
- d. Remove one of the Dash Switch Faceplates, route the Black 8-pin connector through the opening, attach it to the Dash Switch and press the switch into place as shown in Figure 14.

- e. Reconnect the negative terminal, power on the accessories and test the fan works in both speeds.
- f. Attach the 3" Vents to the 3" Double Vent Bracket. Attach the 2" Duct Hoses to the 3" Vents. Hold up against the lower dash as shown Figure 15, transfer the hole locations. Drill with a 1/4" Drill bit. Insert the Bracket using the Plastic Push Pins.

5. Coolant Routing and Hookup

- a. Cut the included 5/8" Coolant Hose in half making two equal lengths. From the Passengers Rear Engine Bay, route the 5/8" coolant hose through the center tunnel and to the Passengers Front Wheel well area as shown in Figure 16, Figure 17, Figure 18, Figure 19. Pull the hose up to the wheel well area.
- b. Remove the Black Oval Grommet from the firewall and insert the custom Rubber Grommet as shown in Figure 20.
- c. From the Front Passenger wheel well, measure and cut 12" of coolant hose from the ends of both hoses. Insert 5/8" x 90° Brass fittings so that they face the Grommet holes in the firewall as shown in Figure 21a. Add the 12" of Coolant hose to the 90° Fittings and secure with #10 Hose Clamps. Route the hoses through the firewall.
- d. Refer to Figure 21b, Align the two hoses under their respective copper ports (one closer and one further, it doesn't matter which), subtract the length of a 90° Brass Fitting and cut the hoses to length. Insert the 90° Ports, add the cut pieces of 5/8" Coolant hose to the 90° port. Secure with #10 Hose Clamps. Cut the 5/8" Hose to length and insert over Copper Ports. Secure with #10 Hose Clamps.
- f. Pull the remaining 5/8" Coolant Hose to the engine bay, zip tie the hoses as shown in earlier figures.
 - At the Passenger Rear engine area, locate the Oil Cooler recirculating line as shown in Figure 22.
- g. Mark 2" from the Oil Cooler Outlet as shown in Figure 23. From the 2" mark, make another mark 1 ½" inches. If Hose Clamp tools are available, clamp above and below this section as shown in Figure 25.
- h. Use a hose cutter tool or razer blade to cut out the 1 ½" section of hose. Place #6 hose clamps above and below the cut. Insert the 3-Way Ball Valve as shown in Figure 26 and secure one of the #6 Hose Clamps.
- i. Cut the section of hose, insert the other side of the 3-way valve. Secure with #6 Hose Clamp as shown in Figure 27. Cut one of the 5/8" Coolant Hose to length and attach it to the 3-Way Ball Valve. It doesn't matter which hose is used.
- j. Clamp off above and below the Return Radiator hose as shown in Figure 28.
- k. Mark a 1"-1.5" Section of hose as shown in Figure 29. Cut this section of hose out.
- I. Insert the 1-1/8" Brass Y Fitting as shown in Figure 30, secure the ends with #16 Hose Clamps.
- m. Cut the remaining 5/8" Coolant Hose to length and attach to 5/8" Brass Barb. Secure with a #10 Hose Clamp as shown.

6. Air Bleeding and Coolant Replenishment –

READ ALL INSTRUCTIONS FIRST – The Coolant Bleeding procedure for the U10 Pro happens in 2 Stages. The First stage bleeds air from the engine while isolating the heater core. Stage Two bleeds air from the heater core.

STAGE 1 – Engine Air bleeding

- a. Make sure all hoses are secured away from the drive shaft, hot, rotating or sharp objects.
- b. Turn the Heaters 3-Way Ball Valve to the 'SUMMER MODE' as shown in Figure 31.
- c. Refill cooling system per manufacturers procedure quoted from Operators manual (Page 197) below.
- d. Loosen the Air Bleed Screw shown in Figure 32 at the top of the engine (loosen a couple turns).
- e. Open the Expansion Tank Cap shown in Figure 33 and replenish the coolant until it flows out from the Air Bleed Screw. Tighten the air bleed screw and replenish the coolant to 'Max' level line in the Expansion Tank.
- f. Start the vehicle, idle the engine for 30 seconds (do not install the expansion tank cap during the warm up), and inspect the Expansion Tank Exhaust Port in Figure 33 for coolant flow. If there is no flow, turn off the engine and loosen the air bleed screw until there are no more bubbles in the coolant flow. Tighten the air bleed screw and replenish the coolant to the 'Max' level as necessary.
- g. Repeat step 4 until coolant flows out at the Expansion Tank Exhaust Port. Then install the Expansion Tank Cap. Start the engine and idle until the <u>cooling fan starts</u> and then shut off the engine and let it cool completely.

STAGE 2 - Heater Air Bleeding

- a. With the engine cold, open the Expansion Tank and fill to 'Max' if needed. Keep the cap off. Turn on the vehicle and fast idle until the radiator fan starts to run.
- b. After the cooling fan starts running, open the 3-Way Ball Valve at the engine. This will allow coolant to run through the heater core, pushing the air out into the engine and then through to the radiator where it can escape to the Expansion tank.
- c. Continue running the vehicle at fast idle, taking note of the vehicle temperature. If it begins to overheat, stop the engine, put the cap on the expansion tank and let it cool down completely. Restart State 2 once cool.
- d. Continue to run at fast idle, allowing the radiator fan to regulate engine temp 1-2 more cycles.
- e. Put the Expansion Cap on, perform 1-2 more cycles of cooling.
- f. Turn the vehicle off, let cool completely. Fill expansion tank as necessary, check for leaks.



Figure 1

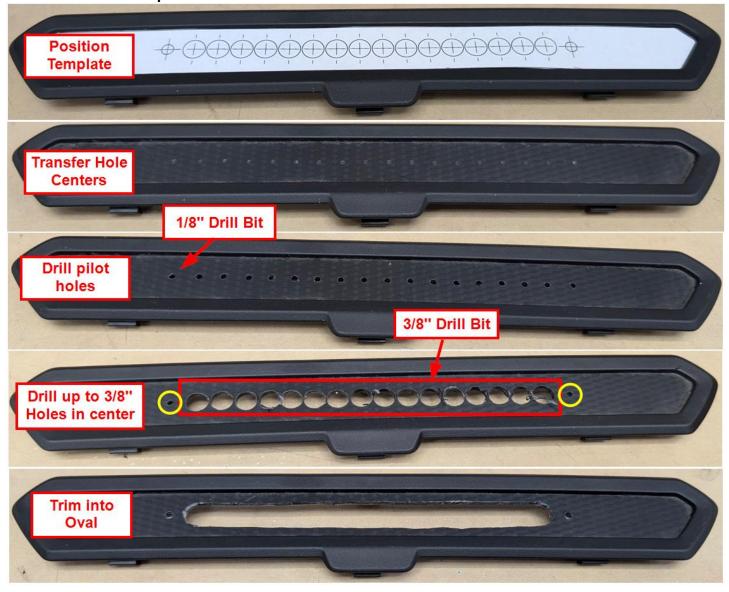


Figure 2



Figure 3



Figure 4

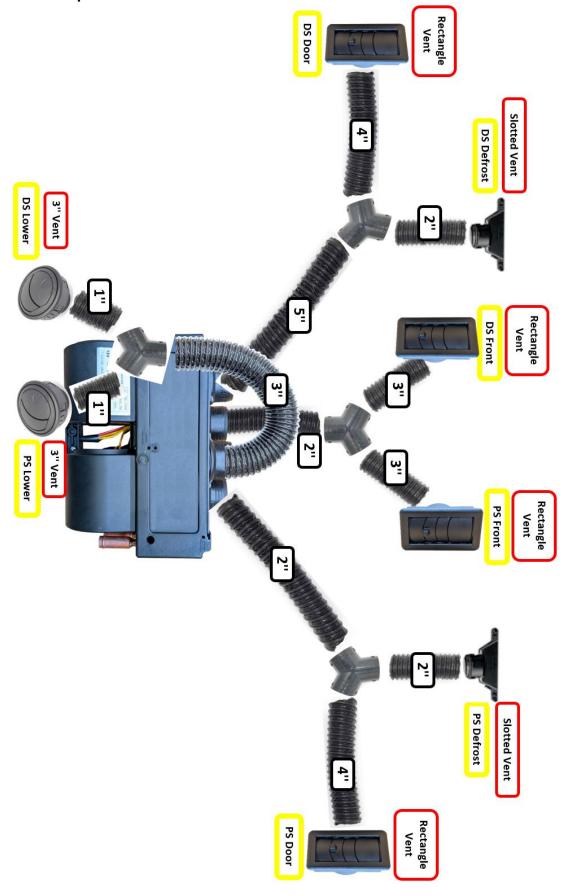


Figure 5



Figure 6



Figure 7

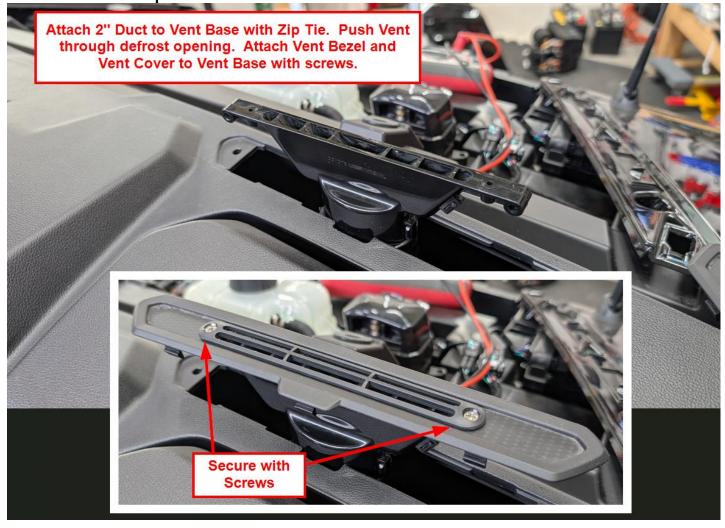


Figure 8



Figure 9

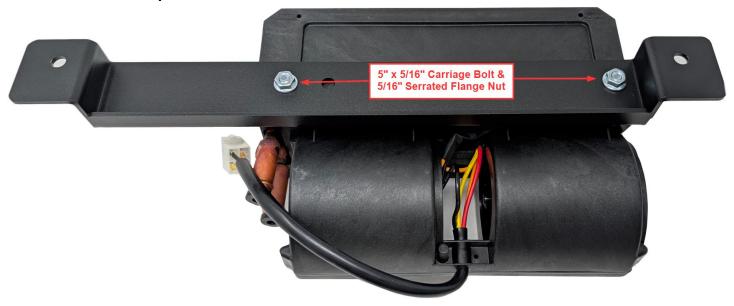


Figure 10

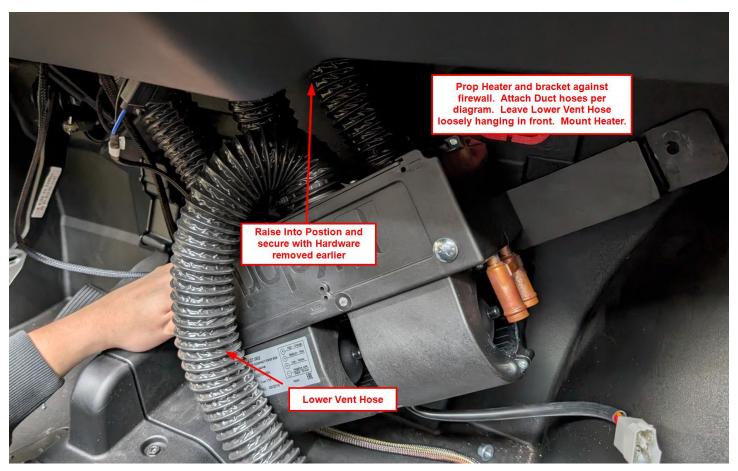


Figure 11

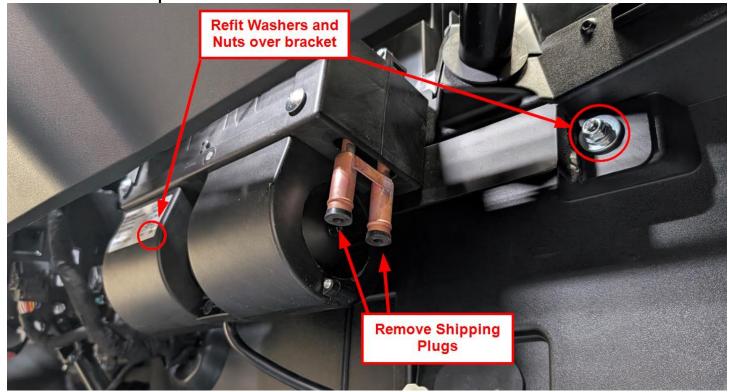


Figure 12

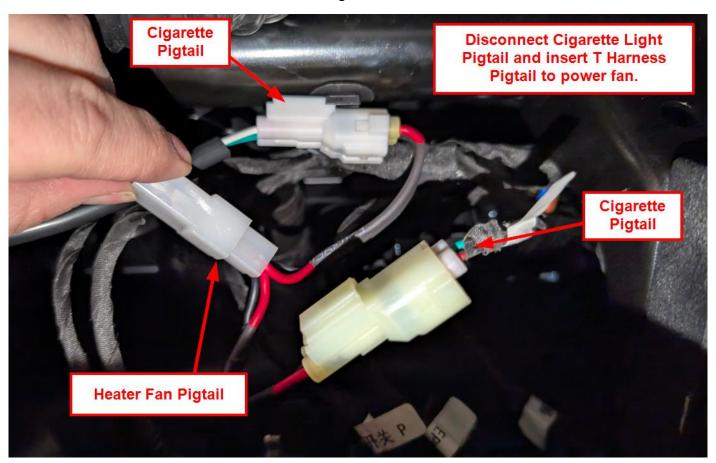


Figure 13



Figure 14

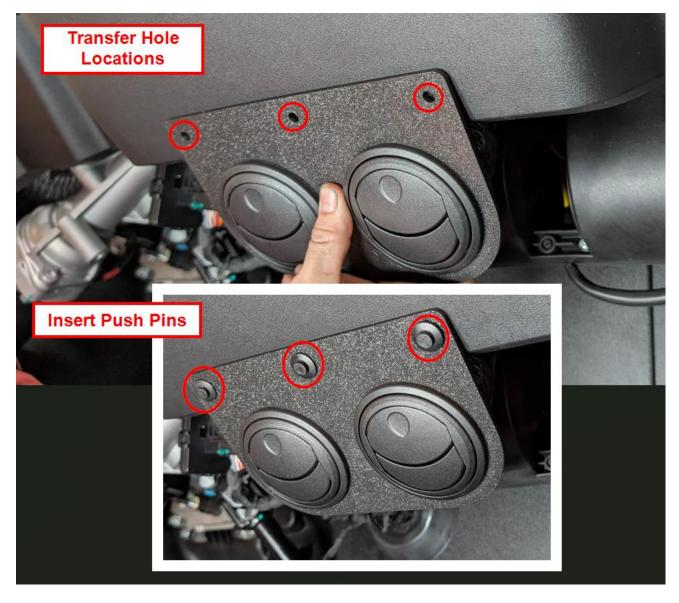


Figure 15

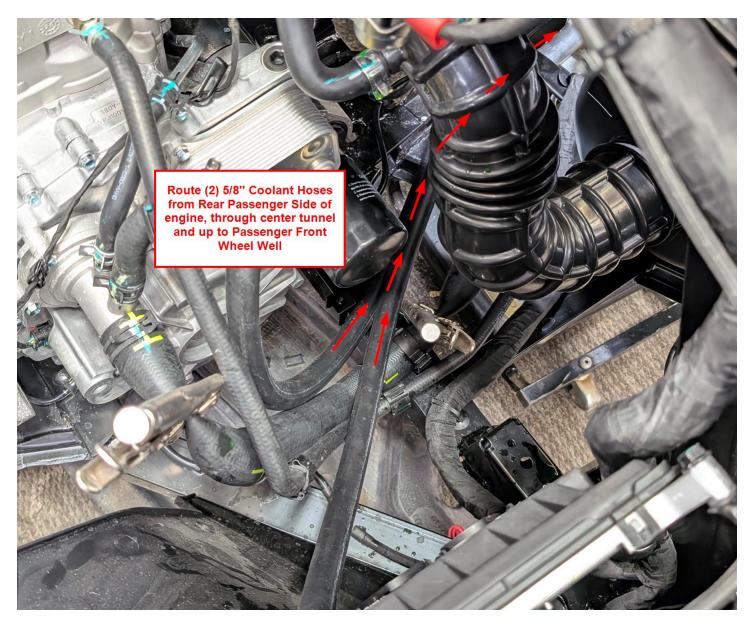


Figure 16

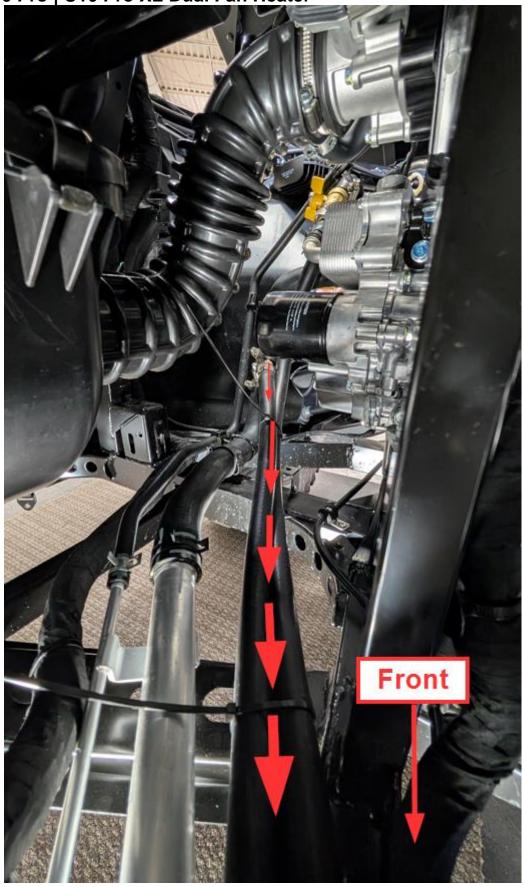


Figure 17



Figure 18

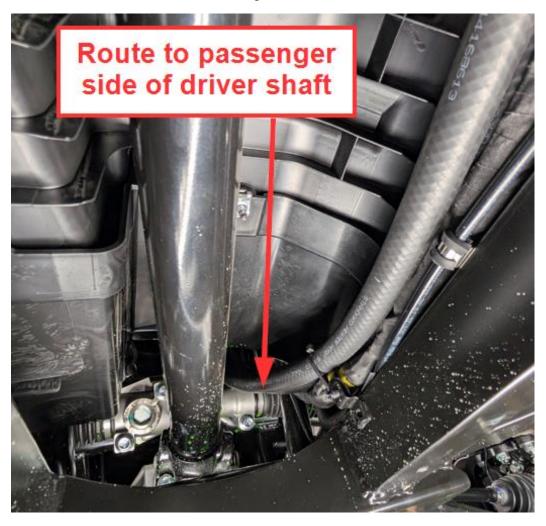


Figure 19

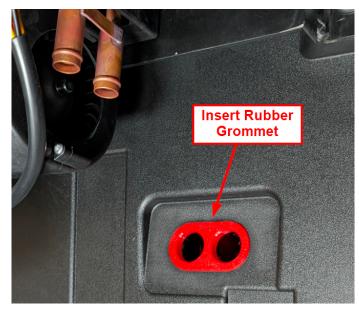


Figure 20

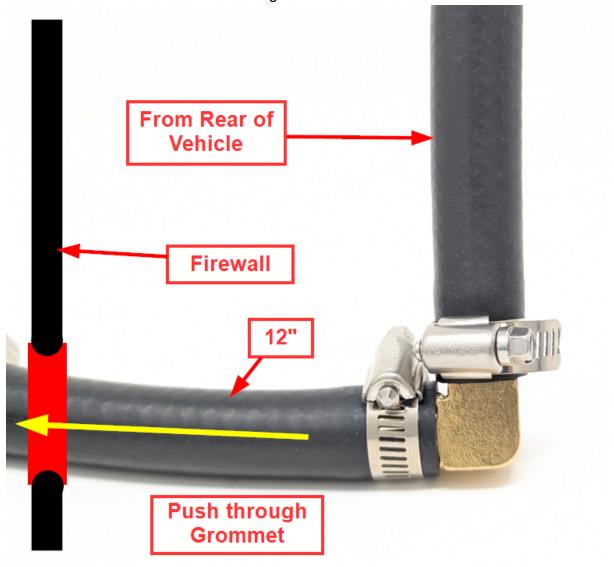


Figure 21a

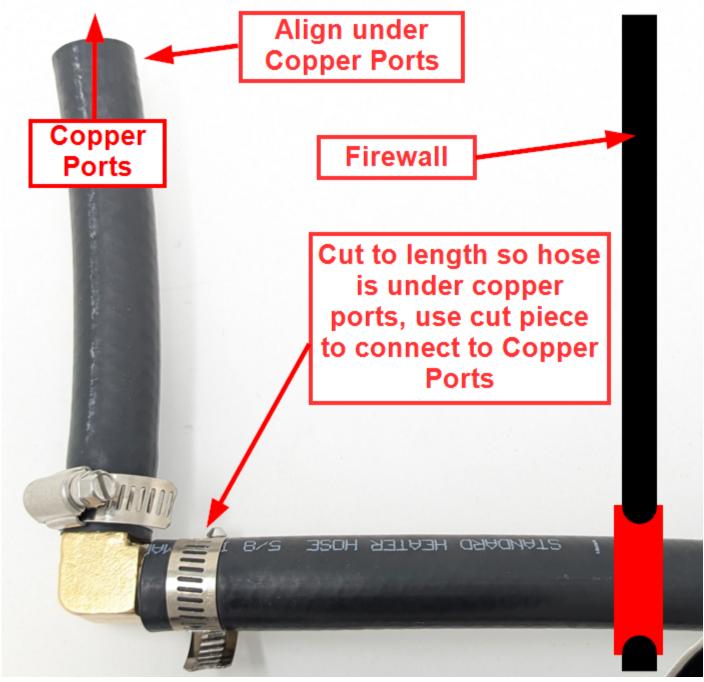


Figure 21b

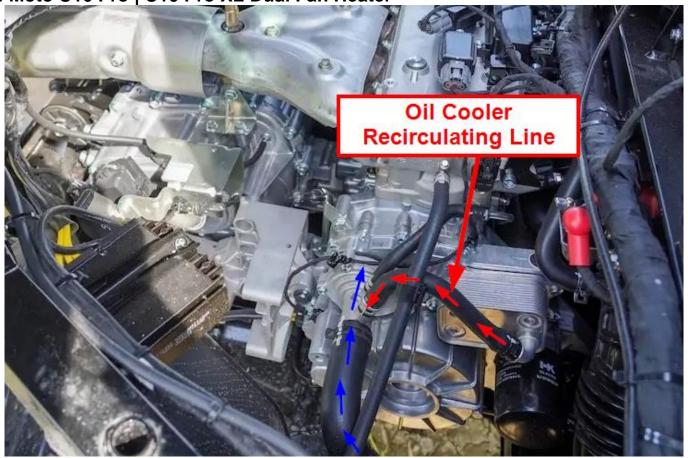


Figure 22

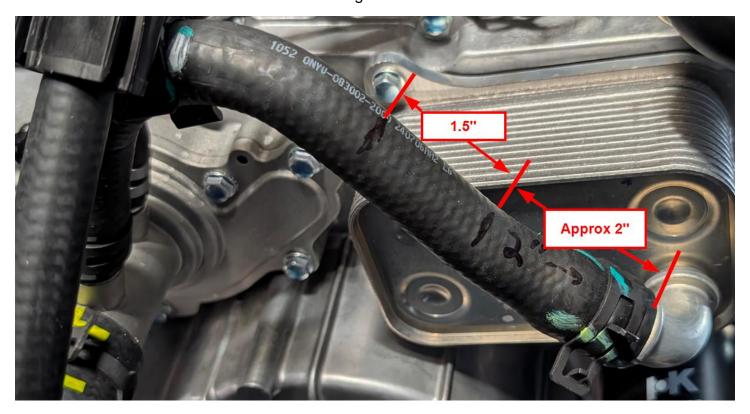


Figure 23



Figure 24

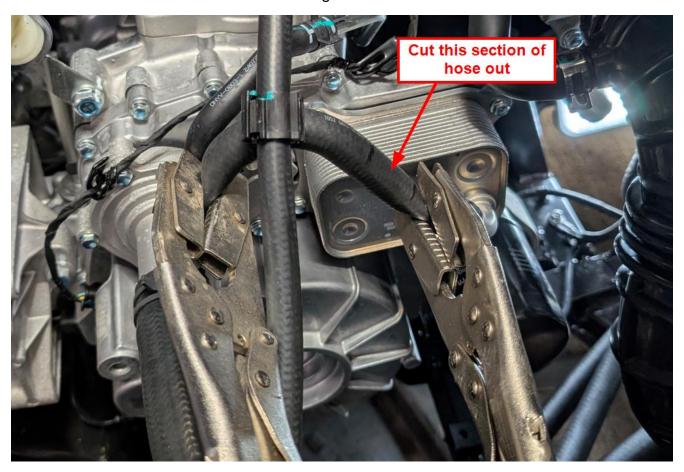


Figure 25

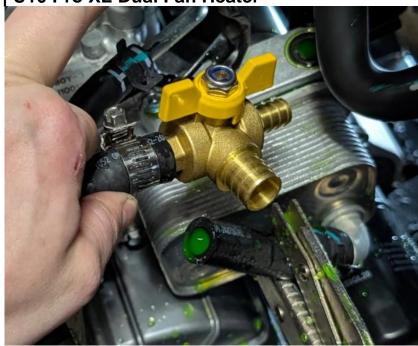


Figure 26

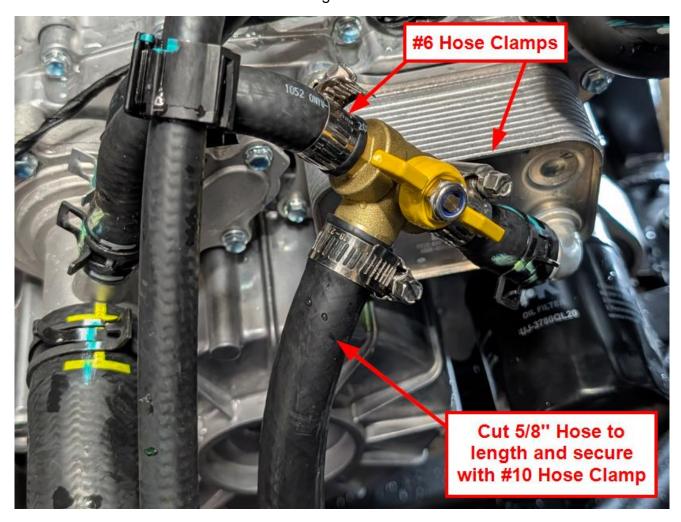


Figure 27

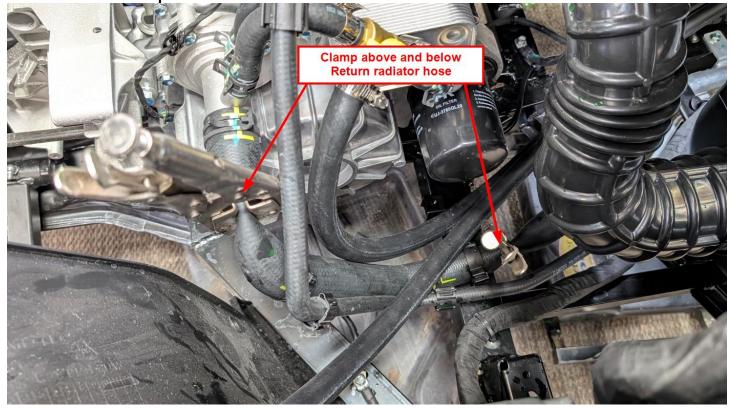


Figure 28



Figure 29

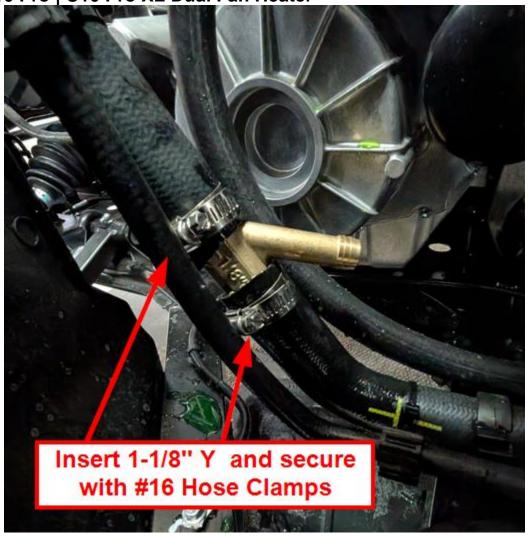


Figure 30







ON (WINTER)

Figure 31

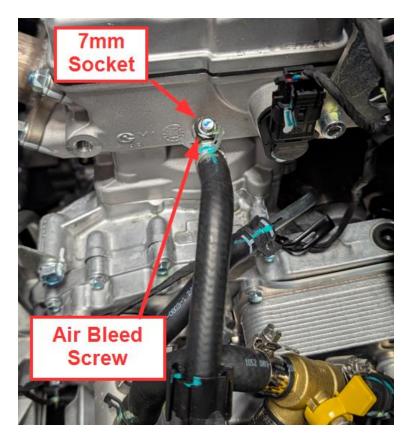


Figure 32

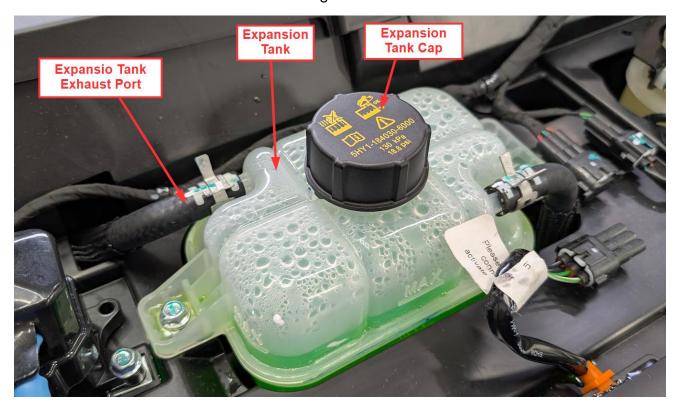


Figure 33

HEATER WARRANTY – icecrusherheaters.com and coupersproducts.com

*Coupersproducts.com/Icecrusherheaters.com Heater Warranty. 3 Year/36 Month Limited Warranty

Ice Crusher Heaters warrants your Ice Crusher UTV Heater System to be free from defects in material and craftsmanship under normal use and service by the original consumer purchaser (end user) for a period of Three (3) year from the date of purchase on all components including electrical components. The warranty is null and void if the system has been damaged by accident, improper installation, unreasonable use, lack of proper maintenance, unauthorized repairs or modifications, or causes not arising from defects in materials and craftsmanship.

Ice Crusher Heaters obligation under this warranty are limited to repair of the product at Ice Crusher Heaters production facility, or the replacement of the product at Ice Crusher Heaters option and at Ice Crusher Heaters expense. Any expense involved in the removal, reinstallation, or transportation of the product is **not** covered by this warranty. Prior to return of any product to Ice Crusher Heaters, customer must contact Ice Crusher Heaters customer service, (888)-964-0135, info@utvheaters.com, and obtain a Return Authorization Number. This number must be marked on exterior of carton for easy identification. Warranty product received at Ice Crusher Heaters without a Return Authorization Number may be returned at expense of sender.

Postage must be prepaid, and the original dated proof-of-purchase must be confirmed or provided. Ice Crusher Heaters will not be liable for any damages sustained in transport due to improper packaging or handling. The acceptance by UTV HEATER WARRANTY – utvheaters.com and coupersproducts.com

This warranty is Couper's Products only express warranty of this product. We reserve the right to make changes to products and policy that are in the best interest of Couper's Products. No implied warranty shall extend beyond One (1) or Three (3) year period from the date of the original consumer (end user) purchase. Couper's Products will not be liable for any damages, for loss of use of this product, nor for any consequential damages, costs or expenses.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights not mentioned here that vary from state to state.

After receiving a Return Authorization Number send defective product to:

Ice Crusher Heaters

Attn: Warranty

23001 Industrial Blvd

Rogers, Minnesota, 55374

Defrost Template

